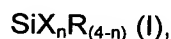
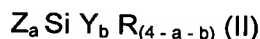


Claims :

1. An electrically conductive coating, in particular for toner transfer drums, that is producible by hydrolytic condensation of a mixture comprising at least one hydrolysable silicon compound of general formula:



wherein the radicals X, which can be the same or different, and can in particular be selected from the group comprising optionally alkoxy groups substituted by halogen or alkoxy, hydroxy groups, halogen, aryloxy and acyloxy groups, hydrogen, straight-chained, branched or cyclic alkyl, alkenyl, and alkynyl radicals, having from 5 to 20 carbon atoms; and wherein the radicals R, which may be the same or different, are selected from the group comprising alkyl, alkenyl, alkynyl, aryl, whereby the groups can have one or more substitutes inert under reaction conditions, and the abovementioned alkyl radicals include cyclic and aryl-substituted radicals, the alkenyl and alkynyl groups can be cyclic and the aryl groups include alkaryl groups, whereby the abovementioned groups have one or more substitutes inert under reaction conditions and whereby n is a whole number from 1 to 4, whereby the mixture further includes one or more hydrolytically condensable compounds of silicon or other elements selected from the group comprising B, Al, P, Sn, Pb, transition metals, lanthanides and actinides, whereby at least one of the monomer compounds to be used for condensation is derived from a silicon compound of general formula:



wherein the radicals and indices are the same or different wherein :

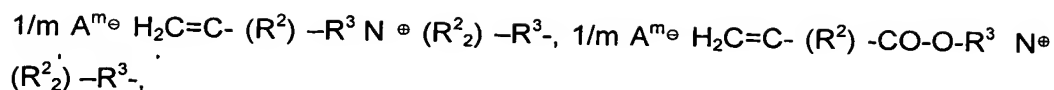
Y = hydrogen, halogen, hydroxy, optionally substituted alkoxy, acyloxy, alkyl carbonyl, alkoxy carbonyl, or NR'_2 ;

Z = quaternary ammonium salts derived from $\text{R}^2_2 \text{N} - (\text{R}^3 - \text{NR}^2 -)_k - \text{R}^3 -$, or

$\text{Z} = 1/m \text{ A}^{m\oplus} \text{R}^2_2 - \text{N}^\oplus - \text{R}^3 -$, $1/m \text{ A}^{m\oplus} (\text{HO} - \text{R}^3)_2 \text{N}^\oplus - \text{R}^3 -$,

$1/m \text{ A}^{m\oplus} (\text{R}^2\text{O})_2 \text{P}^\oplus (\text{O}) - \text{R}^3 -$, $1/m \text{ A}^{m\oplus} \text{R}^2_2 - \text{N} -)_2 \text{C} - \text{S}^\oplus - \text{R}^3$,

$3/n \text{ K}^{n\oplus} (\text{OOC}^\ominus)_2 - \text{N} - \text{R}^3 - \text{N}(\text{COO}^\ominus) - \text{R}^3 -$,



R = optionally substituted alkyl, alkenyl, aryl, alkylaryl, or arylalkyl;

R' = hydrogen, alkyl, or aryl;

R² = hydrogen, optionally substituted alkyl, alkenyl, aryl, alkylaryl, or arylalkyl;

R³ = optionally substituted alkylene, alkenylene, or arylene;

A^{m⊖} = anion with a valence of m;

K^{n⊕} = cation with a valence of n;

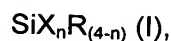
a = 1, 2, or 3;

b = 1, 2, or 3;

a+b = 2, 3, or 4; and

k = 0, 1, 2, or 3, characterised in that the mixture to be condensed hydrolytically comprises at least a portion of an ether having an alkenyl group.

2. The antistatic coating as claimed in Claim 1, wherein the mixture comprises at least one hydrolysable silicon compound of formula



wherein one of the R radical is a mercapto-substituted alkyl or aryl group.

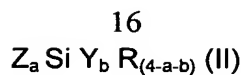
3. The antistatic coating as claimed in Claim 1, wherein the mixture to be condensed hydrolytically comprises a portion of an ether exhibiting a vinyl group.
4. The antistatic coating as claimed in Claim 3, wherein the mixture to be condensed hydrolytically comprises a portion of a vinylalkyl ether.
5. The antistatic coating as claimed in Claim 4, wherein the mixture to be condensed hydrolytically comprises a portion of a vinylbutyl ether.
6. The antistatic coating as claimed in Claim 1, wherein at least one hydrolysable silicon compound in the mixture is a (mercaptoalkyl)alkoxysilane.

7. The antistatic coating as claimed in Claim 1, wherein at least one hydrolysable silicon compound in the mixture is a vinylalkoxysilane.
8. The antistatic coating as claimed in Claim 7, wherein the mixture contains at least one (mercaptoalkyl) trialkoxysilane compound and at least one vinylalkoxysilane compound, whereby the vinylalkoxysilane compound, relative to the quantity of the (mercaptoalkyl) alkoxysilane compound, is employed in a lesser quantity and the mixture additionally contains a quantity of an ether exhibiting at least one vinyl group.
9. The antistatic coating as claimed in Claim 1, wherein the coating can be produced by the addition of at least one optionally substituted dialkoxysilane following hydrolysis of the compounds of the starting mixture.
10. The antistatic coating as claimed in Claim 9, wherein the coating can be produced by the addition of at least one dialkoxysilane or at least one dialkyldialkoxysilane or at least one diaryldialkoxysilane following hydrolysis of the compounds of the starting mixture.
11. The antistatic coating as claimed in Claim 10, following hydrolysis of the compounds of the starting mixture, at least one dialkoxysilane is added in the form of a precondensate.
12. The antistatic coating as claimed in Claim 1, wherein the coating can be produced by hydrolysis of a mixture comprising at least one compound of formula:



wherein at least one of the Z radicals is a quaternary ammonium group, in which at least one of the substitutes on the nitrogen is an alkyl group.

13. The antistatic coating as claimed in Claim 1, wherein the coating can be produced by hydrolysis of a mixture comprising at least one compound of formula:



wherein at least one of the Z radicals is a quaternary ammonium group, in which at least one of the substitutes on the nitrogen is a long-chain aliphatic group.

14. A process for manufacturing an antistatic coating, preferably on a toner transfer drum, wherein a mixture comprising at least one of the compounds specified in Claim 1 is hydrolytically condensed and then cured by radiation preferably in the presence of a photoinitiator.
15. The process as claimed in Claim 14, wherein at least one of the compounds is used partly or wholly in the form of a precondensate.
16. The process for manufacturing an antistatic coating on a toner transfer drum, wherein first a charge-generating layer is applied to a cylindrical substrate, after which a transport layer carrying charges is applied thereto, and then an antistatic coating serving as a protective layer and having the characteristics of Claim 1 is applied thereto as an additional layer.